

For the PTO's convenience, claims that remain unchanged are included below in order to allow the Examiner to review all pending claims from this response in their numerical order.

Please cancel claims 3 to 5.

6. (Unchanged) A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of:

- receiving a first control signal at one or more origination transmitters;
- receiving a second control signal at said one or more origination transmitters, said second control signal operative to communicate said first control signal to an intermediate transmitter; and
- transmitting said first control signal to said at least one of said plurality of receiver stations, said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.

7. (Unchanged) A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of:

- receiving and storing a control signal at a transmitter station; and
- causing said control signal to be communicated to a transmitter at a specific time, thereby to transmit said control signal, said control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific

value by processing information stored in said computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.

Please cancel claims 8 to 20.

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~~21. (Three Times Amended) The method of claim 6, wherein said computer is operatively connected to said intermediate transmitter for generating some portion of at least one of a computer program and a data module in response to an instruct signal, said method further comprising the steps of receiving said instruct signal at said one or more origination transmitters and transmitting said instruct signal to said computer.~~

22. (Unchanged) The method of claim 6, wherein said receiver specific program includes a simultaneous or sequential presentation of two or more of units of programming, said method further comprising the steps of:

receiving said at least one of said two or more units of programming and communicating said at least one of said two or more units of programming to said one of said one or more origination transmitters and said intermediate transmitter.

Please cancel claims 23 to 24.

25. (Unchanged) A method for controlling the transmission of a control signal from an intermediate transmitter station to a receiver station, said intermediate transmitter station having a first computer, one or more receivers and one or more transmitters, comprising the steps of:

receiving, at one or more of said receivers of said intermediate transmitter station, one or more first control signals, each of said one or more first control signals received from outside of said intermediate transmitter station;

receiving, at one or more of said receivers of said intermediate transmitter station, one or more second control signals, each of said second control signals received from outside of said intermediate transmitter station, wherein said one or more second control signals are operative to cause said first computer in said intermediate transmitter station to select a specific first control signal and to communicate said selected first control signal to at least one of said transmitters of said intermediate transmitter station; and

transmitting, from said one or more transmitters of said intermediate transmitter station to said receiver station, said selected first control signal, said selected first control signal operative at said receiver station to control a second computer to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to an output device based on said receiver specific signal.

26. (Unchanged) The method of claim 25, wherein each of said one or more first control signals is received at said intermediate transmitter station before each of said one or more second control signals is received.

27. (Unchanged) The method of claim 25, wherein at least one of said one or more first control signals is received at said intermediate transmitter station after one or more of said second control signals is received.

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28. (Amended) The method of claim 25, further comprising the step of storing said selected first control signal at one or more storage devices included within said intermediate transmitter station.

29. (Amended) The method of claim 28, wherein the time of said transmitting step is performed according to information included within said one or more second control signals.

Please cancel claims 30 to 32.

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33. (Amended) The method of claim 6, further comprising the steps of:
receiving operating instructions at said one or more origination transmitters, said operating instructions effective to control a processor to respond to at least one of said first control signal and said second control signal; and
transmitting said operating instructions to at least one of said intermediate transmitter station and said plurality of receiver stations.

34. (Unchanged) The method of claim 7, further comprising the steps of:
receiving operating instructions at said one or more transmitter station, said operating instructions effective to control a processor to respond to said control signal;
and
transmitting said operating instructions to at least one of said plurality of receiver stations.

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35. (Amended) A method of delivering a receiver specific program at a receiver station having a computer and an output device, said method comprising the steps of:

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- (a) receiving a broadcast or cablecast information transmission comprising a plurality of units of programming and one or more control signals;
- (b) communicating each of said plurality of units of programming to at least one of:
- (1) said computer for processing; and
- (2) said output device for delivery to a user;
- (c) detecting said one or more control signals in said broadcast or cablecast information transmission and passing said detected one or more control signals to said computer;
- (d) controlling said computer based on said detected and passed one or more control signals, said step of controlling comprising:
- (1) generating a receiver specific value by processing information that is stored in said computer;
- (2) selecting at least one of said plurality of units of programming based on said receiver specific computer generated value; and
- (3) communicating said selected at least one of said plurality of units of programming to said output device; and
- (e) delivering at said output device a simultaneous or sequential presentation of two or more units of programming, said two or more units of programming including said selected and communicated programming.

36. (Unchanged) The method of claim 35 wherein said receiver specific program includes a print program and said selected at least one of said plurality of units of programming includes text, said method further comprising the step of placing said text in a buffer that outputs to said output device.

37. (Unchanged) The method of claim 35 wherein said receiver specific program includes a television or radio program and said selected at least one of said plurality of units or programming includes audio, said method further comprising the steps of:

clearing an audio RAM that outputs to said output device; and
placing said audio into said audio RAM.

38. (Unchanged) The method of claim 35, wherein said selected at least one of said plurality of units of programming includes video, said method further comprising the steps of:

clearing a video RAM that outputs to said output device; and
placing said video into said video RAM.


Please cancel claims 39 to 54.

55. (Unchanged) A method of processing signals at a receiver station having a computer and an output device to deliver at the output device a combined or sequential output of a broadcast or cablecast program and a receiver specific datum, said method comprising the steps of:

- (a) receiving an information transmission comprising a broadcast or cablecast program and at least one control signal;
- (b) selecting said received broadcast or cablecast program from the information transmission and transferring it to the output device for delivery to the user;
- (c) detecting a specific first control signal in the information transmission and passing said detected specific first control signal to the computer; and
- (d) controlling said computer based on the specific first control signal, said step of controlling comprising:

(1) generating a receiver specific datum by processing first information that is stored in said computer;

15 (2) placing said receiver specific datum at a specific memory location of the computer;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory location;

26 whereby the combined or sequential output of said received broadcast or cablecast program and said receiver specific datum is delivered at said output device in the period of time between said step of placing said datum at said memory location and said step of clearing said datum from said memory location.

56. (Unchanged) The method of claim 55, wherein the step of generating a receiver specific datum by processing information that is stored in the computer is achieved by executing a computer program stored in the memory of the computer to process said stored first information, said method further comprising the step of:

detecting in said information transmission a second control signal which is effective to load the computer program into the memory of the computer.


Please cancel claims 57 to 59.

60. (Unchanged) The method of claim 55, wherein at least one of the processing, generating, or outputting of said computer is controlled by a programmable controller in response to the control signals detected in the broadcast or cablecast information transmission.


Please cancel claims 61 to 77.

78. (Unchanged) A receiver station apparatus for processing signals to deliver a combined or sequential output of a broadcast or cablecast program and a receiver specific computer generated datum, comprising:

an output device, said output device for delivering said program and receiver specific computer generated datum;

a decoder comprising means for:

(1) receiving an information transmission comprising a broadcast or cablecast program and control signals;

(2) detecting the presence of the control signals in the information transmission; and

(3) passing the detected control signals;

↯ a computer, said computer being operatively connected to said output device and said decoder, said computer having a specific memory location connected to said output device for communicating data stored in said specific memory location to said output device, and said computer being programmed to perform the following steps based upon one or more specific control signals detected and passed from said decoder:

7 (1) generating a receiver specific datum by processing information that is stored in said computer;

(2) placing said receiver specific datum in said specific memory location;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory location, thereby delivering a combined or sequential output of said received broadcast or cablecast program and said receiver specific datum at said output device in the period of time between said step of placing said datum at said memory location and said step of clearing said datum from said memory location.

79. (Unchanged) A method of communicating mass medium program material from a transmitter station to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer, and with each said receiver station adapted to detect the presence of at least one control signal, to generate a receiver specific datum in response to a detected specific control signal, and to deliver at said output device a combined or sequential output of a broadcast or cablecast program and the receiver specific datum, said method comprising the steps of:

- (1) receiving at a transmitter station a program to be transmitted and delivering the program to a transmitter;
- (2) receiving and storing at said transmitter station a control signal which at the receiver station operates to generate a receiver specific datum; and
- (3) communicating said control signal to the transmitter at a specific time, thereby to transmit an information transmission comprising the program and said control signal.


Please cancel claims 80 to 88.

89. (Unchanged) The method of claim 79, wherein a controller at said transmitter station controls the passing of a specific received signal, said method further comprising the steps of detecting embedded information in said specific received signal and controlling the passing of said specific received signal on the basis of said detected embedded information.


Please cancel claims 90 to 102.

103. (Unchanged) The method of claim 79, wherein a plurality of signals is received from one or more remote stations at said transmitter station and at least one is stored at said transmitter station which is operative to schedule transmission, said method further comprising the steps of programming said transmitter station to store the schedule and causing said transmitter to transmit in accordance with the schedule.

104. (Unchanged) The method of claim 103, further comprising the step of causing said transmitter station to generate, in accordance with the schedule, signals to be transmitted.

105. (Unchanged) The method of claim 79, further comprising the steps of receiving at said transmitter station an information transmission from a remote station, detecting in the information transmission an instruct signal which is effective at the transmitter station to execute an instruction set, loading and executing an instruction set at a transmitter station computer in response to said instruct signal, and on the basis of said instruction set, selecting information to be processed at a receiver station or communicating information to be associated with said program.

106. (Unchanged) The method of claim 79, wherein a controller at said transmitter station controls a memory location to communicate to said transmitter a selected control signal, said method further comprising the steps of detecting a first instruct signal which is effective at the transmitter station to instruct transmission, and inputting said first instruct signal to said controller thereby to cause said memory location to communicate a selected control signal.

Please cancel claim 107.

108. (Unchanged) The method of claim 106, further comprising the steps of storing said first instruct signal at said transmitter station, and controlling said memory location to communicate a selected control signal at a scheduled time according to said first instruct signal.

109. (Unchanged) The method of claims 106, further comprising the step of controlling said memory location to communicate said program to said transmitter in response to a second instruct signal.

110. (Unchanged) The method of claim 109, further comprising the steps of detecting a selected control signal communicated from said memory location and programming a controller to respond to a control signal communicated from said memory location.

111. (Unchanged) The method of claim 106, further comprising the step of embedding first instruct signal in said program thereby to enable said controller to respond to said embedded first instruct signal at a time when said program is being communicated.

Please cancel claims 112 to 124.

125. (Unchanged) A transmitter station apparatus for processing signals and communicating mass medium program materials to present at each of a plurality of receiver stations a combined output of a broadcast or cablecast program and a receiver specific computer generated datum, with each of said receiver stations having an output device for receiving and delivering the broadcast or cablecast program and other information, said station also having a microcomputer with a specific memory location

operatively connected to said output device for storing and outputting information to said output device, said transmitter station apparatus comprising:

- 9 a broadcast or cablecast transmitter for communicating to a plurality of receiver stations an information transmission;
- a program input receiver operatively connected to said transmitter for communicating the program to said transmitter;
- 13 a memory or recorder operatively connected to said transmitter for storing and communicating a first control signal which at the receiver station operates to generate the receiver specific datum; and
- 16 an input device operatively connected to said memory or recorder for causing said memory or recorder to communicate said first control signal at a specific time to said transmitter, thereby to communicate said information transmission, said information transmission comprising said program and said first control signal, to said receiver stations and cause each of said plurality of receiver stations to deliver said program at its output device, generate a receiver station specific datum, place its receiver station specific datum at its memory location for a period of time, and deliver a combined output of said broadcast or cablecast program and its receiver station specific datum at its output device.

Please cancel claim 126.

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~~127. (Amended) A method of communicating mass medium program material to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer with a specific memory location capable of communicating to said output device, and with each said receiver station adapted to detect the presence of control signals, to generate a receiver specific datum in response to a detected specific control signal, and to deliver at said~~

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output device a combined or sequential output of a broadcast or cablecast program and the receiver specific datum, said method comprising the steps of:

- (1) receiving at a transmitter station a program to be transmitted;
 - (2) receiving at said transmitter station a first control signal which at the receiver station operates to generate the receiver specific datum;
 - (3) receiving a second control signal which operates at said transmitter station to communicate at least one of said program and said first control signal to a transmitter; and
 - (4) transmitting an information transmission comprising said program and said first control signal.
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128. (Unchanged) The method of claim 127, wherein said second control signal is operative to control an intermediate transmission station to transmit said information transmission to at least one of said plurality of receiver stations, said method further comprising the step of transmitting said second control signal to said intermediate transmitter station.

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129. (Amended) A method of processing signals at a receiver station including:

- receiving an information transmission including a program or program segment, processor code, and at least one control signal;
- detecting said at least one control signal;
- passing said detected at least one control signal to one or more processors;
- selecting said processor code based on said at least one control signal;
- communicating said processor code to said one or more processors;
- controlling of said one or more processors to generate at least some of an audio signal based on a first portion of said communicated processor code;

controlling said one or more processors to communicate to an output device said generated at least some of an audio signal based on a second portion of said communicated processor code; and

outputting at least a portion of said program or program segment in accordance with said processor code.

130. (Amended) The method of claim 129, wherein said information transmission includes a multichannel broadcast or cablecast signal, said method further comprising the step of controlling a converter to select a signal including at least one of said first portion and said second portion.

131. (Amended) The method of claim 129, wherein said information transmission includes a television or radio signal, said method further comprising the step of controlling a decoder to select a portion of said television or radio signal.

Please cancel claim 132.

133. (Amended) The method of claim 129, wherein said program or program segment includes digital video or audio, said method further comprising the steps of:

directing at least some of said first portion and said second portion to a video storage or output device; and

directing at least some of said first portion and said second portion to an audio storage or output device.

134. (Unchanged) The method of claim 129, further comprising the steps of:
storing subscriber data;

generating output information content to complete or supplement said program or program segment by processing said stored subscriber data; and
outputting said generated output information content.

135. (Unchanged) The method of claim 129, further comprising the step of generating at least some of a television signal by processing information directed to said one or more processors.

136. (Amended) The method of claim 129, further comprising the step of clearing one or more output memory locations at said output device based on at least one control signal, wherein said output device includes at least one of a video storage or output device, and an audio storage or output device.

137. (Unchanged) The method of claim 129, wherein said processor code includes a portion or segment which operates to execute a controlled function, said method further comprising the step of comparing said portion or segment to controlled function identification information, said controlled function identification information being organized to execute said controlled function when identified by said portion or segment.

138. (Unchanged) The method of claim 129, further comprising the step of programming said receiver station to execute a controlled function in response to said at least one control signal.

139. (Amended) A method of processing signals at a receiver station, comprising the steps of: